Fact Sheet: 6

Lead / Copper Sampling
Nontransient Noncommunity Public Water Supplies

Water Supply Serial Number (WSSN) _____ Well # _____

Name of Water Supply _____

Sampling Contact _____ Phone _____

Health Department Contact _____ Phone _____

Lead/Copper Sampling Frequency: Number of Samples_____taken every _____months.
Sampling Location _____
(Sampling siting plan approved by local health department in sanitary survey)

Laboratory Name _____ Phone _____

Lead/Copper – General Information

Lead is a common metal found throughout the environment in lead-based paint, air, soil, household dust, food and water. It builds up in the body over many years and may result in damage to the brain, red blood cells and kidneys. Lead enters drinking water primarily as a result of corrosion, or wearing away of materials containing lead in the water distribution system. These materials include lead-based solder used to join copper pipes, brass and lead piping. The concentration of lead in drinking water may be a function of numerous factors related to the presence of lead, water chemistry, temperature, pH, system hydraulics, usage, etc., and can vary over time. The presence of copper in drinking water is also primarily a result of corrosion. Acute exposure to copper can result in nausea and diarrhea. The US EPA has established an action level for lead of 0.015 milligrams per liter (mg/l) and 1.3 milligrams per liter (mg/l) for copper, for public water supplies.

SAMPLING PROTOCOL

- Obtain sample containers and analysis from a laboratory certified by the DEQ for lead/copper analysis.
- Collect **first draw** samples. (Water has stood motionless in the piping for at least 6 hours.) Do not sample after weekends, holidays or extended periods of stagnation. **Do not flush the sample tap before sample collection.**
- Collect samples where water is drawn primarily for drinking. Sample drinking fountains or kitchen/break room faucets if they are used routinely to obtain water for consumption. Do not sample from slop sinks, hose bibbs, etc. ones that represent the water distribution system, i.e. one in each building wing or on each floor. Or, you can collect more than the minimum number of samples.

Student and/or Employee Population	Number of Samples Each 6 months	Number of Samples after Reduction*
501 to 3,300	20	10
1 to 500	10	5
<101	5	5

* After 2 six month sets below the action level a reduction to annual testing is allowed

- For large facilities collect at least one sample per building until you get the number of samples required for the population served by the water supply (See Table).
- If you have a only a few buildings, split the samples among them as best you can according to where the water is being consumed.
- If you have fewer drinking water fixtures than the chart requires, sample the ones you have and note on the sample log sheet you have sampled all drinking water fixtures.
- Properly identify the sample location on the lab slip and include the water supply serial number (WSSN) on the lab sample forms to properly identify the samples, otherwise, you may not be credited as having sampled.
- Be sure to request the proper lab analysis or test code for lead/copper and place the forms with the bottles.
- Refrigerate all samples during storage prior to shipment.
- Deliver or mail the samples to the lab as soon as possible.

After Receiving Lead/Copper Test Results

1. Properly record sample results on DEQ sheet following the direction and send a copy to the local health department.
2. Calculate the 90th percentile using the directions on the record sheet, or request the LHD do the calculations to determine the 90th percentile.
3. If you exceed an action level, you must:
    - Notify the local health department within 24 hours or the next business day.
    - Notify the public (consumers) of the **lead** action level exceedance as instructed by the health department and take steps to minimize exposure (shutting off fountain, or flushing) as instructed.
    - Additional actions such as sampling the source water for lead/copper and investigating possible sources of lead in the distribution system should be discussed with the local health department.

Within 6 months of the end of the monitoring period in which the action level was exceeded, the facility will need to submit a proposal to conduct a “treatment study” or install “corrosion control treatment.”